

<b>NWS CHANGE FORM PART A</b>				1. DATE SUBMITTED  5/17/00 Received 6/3/00	
This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).					
2. ORIGINATOR OFFICE  APO		3. SUBMITTING AUTHORITY Name: Ward Seguin Routing Code: W/APO1		4. COGNIZANT TECHNICAL INDIVIDUAL Name: Mathew Peroutka Routing Code: W/OSD25 Phone: 301-713-1768 x144	
				5. ORIGINATOR TRACKING NUMBER  TDL_A100067 <div style="text-align: right;">I(FP_A03)</div>	
6. SYSTEMS AFFECTED BY CHANGE <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <input type="checkbox"/> ASOS     <input checked="" type="checkbox"/> AWIPS     <input type="checkbox"/> CRS     <input type="checkbox"/> NEXRAD     <input type="checkbox"/> OTHER (specify) _____         </div> <div style="border: 1px solid black; padding: 5px; background-color: #f2f2f2;">           7. WSH TRACKING NUMBER   <b>NWS 594</b> </div> </div>					
8. TITLE OF CHANGE Enhance NTCD to support training for the Interactive Forecast Preparation System (IFPS)					
9. TYPE OF CHANGE <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <input type="checkbox"/> HARDWARE     <input checked="" type="checkbox"/> SOFTWARE     <input type="checkbox"/> DOCUMENTATION ONLY         </div> <div style="border: 1px solid black; padding: 5px; background-color: #f2f2f2;">           10. SITES AFFECTED (Attach Part B, Page 2, if needed)             NWS Training Center (NWSTC) system NTCD         </div> </div>					
11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.)  As installed, IFPS cannot support the training mission of the NWSTC for the following reasons:  <div style="margin-left: 40px;">           1. WFO installations of IFPS are designed to support 1-2 forecasters preparing a single, unified forecast. NWSTC needs to train classes of 16 students preparing 8 independent forecasts.            2. WFO installations of IFPS are designed to use current data. NWSTC needs to use specific historical cases that have been prepared in advance.         </div>					
12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.)  See Attachment 1					
13. ALTERNATE SOLUTIONS  N/A					
14. REQUIRED CHANGE DATE  May 2000		15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.)  Need to provide software and support to NWSTC as soon as possible. Instructors are already creating lesson plans.			
<b>CCB/PMC/CMB DECISION</b>					
16. DECISION AUTHORITY LEVEL		<input checked="" type="checkbox"/> Fast Track <input type="checkbox"/> CCB LEVEL ONLY <input type="checkbox"/> PMC or NWS CMB DECISION REQUIRED			
17. CCB LEVEL DECISION  <input type="checkbox"/> APPROVED <input type="checkbox"/> RECOMMEND APPROVAL <input type="checkbox"/> DISAPPROVED		SIGNATURE			
		DATE SIGNED			
<b>FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED</b>					
18. PMC OR NWS CMB DECISION  <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED		SIGNATURE			
		DATE SIGNED			

<b>NWS CHANGE FORM</b> <b>PART B</b>		1. ORIGINATOR TRACKING NUMBER TDL_A100067	
All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.		2. WSH TRACKING NUMBER  <b>NWS 594</b>	
<b>FUNDING INFORMATION</b>			
Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)		3. SOURCE OF FUNDING	4. TOTAL COST \$
5. DEVELOPMENT COSTS (Estimate development costs)  This cost is associated with Release 5.0 development		KMOD _____ BASE	AMOUNT \$0
6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs) N/A		BASE	AMOUNT \$0
7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs) N/A		KMOD _____ BASE	AMOUNT \$0
8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs) N/A			AMOUNT \$0
9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs) Installation and testing: Govt (2 TDL engineers' salaries amount for 48 hours)		KMOD _____ BASE	AMOUNT \$
9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits) IFPS development organizations will have to maintain IFPTS.		KMOD _____	AMOUNT Unknown
<b>SUPPORTING INFORMATION AND SCHEDULES</b> Provide detailed information needed to implement the requested change.			
10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E)  Development began 3/2000; testing at NWSTC planned for 6/2000.		11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.)  N/A	
12. IMPLEMENTATION/RETROFIT SCHEDULE  N/A		13. FACILITY INFORMATION (Attach facility drawings/plans.)  N/A	
14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.) N/A		15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED N/A	
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each) N/A		17. COORDINATION OF CHANGE WITH OTHER CHANGES N/A	
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers. Attach Part B, Page 2, if needed.) N/A		19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.) Maintenance will be required; resource levels unknown.	
20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.) N/A		21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.) N/A	
22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.)  The TDL Engineers will install and test IFPTS with the NWSTC's assistance. Staff hours required are TDL Engineer - 96 hours.			

<b>NWS CHANGE FORM</b> <b>PART C</b>		<b>1. ORIGINATOR TRACKING NUMBER</b> TDL_A100067	
WSH is responsible for Part C, but submitters may complete sections that would help clarify the change requirement or the necessary implementation actions.		<b>2. WSH TRACKING NUMBER</b> <b>NWS 594</b>	
<b>3. CCB COST EVALUATION</b>			
NWS COST \$	FAA COST \$	DOD COST \$	OTHER AGENCY COST \$ (SPECIFY)_____
TOTAL COST \$			
<b>4. IMPLEMENTATION DOCUMENTS REQUIRED</b>			
<input type="checkbox"/> Engineering Modification Note <input type="checkbox"/> Software Release Notes <input type="checkbox"/> Other Document (Specify)_____			
ADDITIONAL IMPLEMENTATION INSTRUCTIONS (e.g., Implementation schedule, parts shipping instructions, equipment disposal procedures, additional documentation required, and status reporting instructions.) Include documentation, data input, notification vehicle, or specific action step required to verify completion of the implementation activity.			
<b>5. IMPLEMENTATION ACTIVITY REQUIRED</b>		<b>6. REQUIRED COMPLETION DATE</b>	<b>7. RESPONSIBLE PERSON AND OFFICE</b>
A. Coordinate implementation schedule with NWSTC through SST		TBD May2000	W/OSD25
B. TDL Engineers install and test IFPTS at NWSTC with NWSTC's assistance.		15Jul2000	W/OSD25
C. Report implementation completion using data provided by the TDL Engineers at AWIPS CCB meetings		15 Sep2000	W/OSD25
F. Ensure this change is reported to the Weather Service Headquarters (WSH) through the Engineering Management Reporting System (EMRS) according to the instructions in Engineering Handbook number 4, part 2. Record this RC number (NWS 594) in Block 17a of the EMRS report.		2 Oct 2000	Site ESA
G. Ensure the appropriate WSH management information and configuration management data bases are updated to reflect these changes.		12 Oct 2000	W/OSO113
TBD			

## (Attachment 1)

### Item 12. Known or Proposed Solution

#### 1.0 SOFTWARE CHANGES TO THE BASELINE SYSTEM

##### 0. New software added.

*None to AWIPS data servers or workstations. Several scripts will be added to host ifp-ntcd to manage the Interactive Forecast Preparation Training System (IFPTS). The scripts will have 2 purposes:*

- 1. Manage test cases for training purposes.*
- 2. Reconfigure one or more workstations to run in "IFP Training Mode" (see "Runtime Signature," below).*

##### 0. Existing files changed/deleted.

*None .*

##### COTS/shareware/freeware.

*None .*

##### Databases.

*Eight new student databases--ifps\_gr1, ifps\_gr2, ..., ifps\_gr8--will be created on ds-ntcd. These databases will largely contain static data to be read by IFPS applications, they will only be used when students are running IFPS applications in "IFP Training Mode." Each database will contain ~85 tables and consume <50 Mb of the dbspace ifpsdbspace.*

##### External/Internal Interfaces.

*None .*

##### Install/Uninstall Instructions.

*This will be a one-of-a-kind installation.*

#### 3.0 RUNTIME SIGNATURE

##### Overview.

*"IFP Training Mode" will be a special, non-standard configuration of one or more NTCD workstations used to support IFPS training while courses are in session. IFP Training Mode will enable a workstation to support IFPS training for 1 pair of students. Action scripts will migrate selected NTCD workstations from standard AWIPS configuration to IFPS Training Mode and back. When a workstation is in IFP Training Mode, it will be of little use except for IFP training. D2D and other basic AWIPS applications will not run.*

##### Processes.

*When a workstation is in IFP Training Mode, students will be able to launch various IFPS applications on that workstation.*

##### Network/Communications.

*NFS mounts will be altered radically on each workstation as it enters*

IFP Training Mode. They will be restored to their normal settings when the workstation returns to normal AWIPS operations. See the following table:

<i>Local Directory</i>	<i>Normal AWIPS Mount Point</i>	<i>IFP Training Mode Mount Point</i>
<i>/awips/adapt</i>	<i>ds:/awips/adapt</i>	<i>directories on ifp-ntcd</i>
<i>/data/fxa</i>	<i>ds:/data/fxa</i>	<i>directories on ifp-ntcd</i>
<i>/data/adapt</i>	<i>ds:/data/adapt</i>	<i>directories on ifp-ntcd</i>

#### Data.

Case archive will reside on ifp-ntcd. More disk space may be needed to support training needs. IFPS workstation log files will reside in a new directory named /log/adapt. This directory will be created on each workstation when entering IFP Training Mode and removed when returning to Normal AWIPS mode.

## **4.0 PERFORMANCE/SYSTEM RESOURCE USAGE ASSESSMENT**

### Key Performance Points.

AWIPS workstations in IFP Training Mode will be running IFPS applications. They will not be running D2D and other AWIPS applications at this time. The data server will experience additional load on its Informix relational databases due to the additional IFPS applications. This load, however, will be more than offset by pointing the /data/fxa and /awips/adapt mount points to ifp-ntcd. The net result should be a reduced load for AWIPS hosts.

### Disk Space.

None.

### Other Resources.

None.

## **5.0 REFERENCES**

### Documentation.

In development.

### Contact Point.

*Matt Peroutka, W/OSD25, Room 10111, SSMC2, Matthew.Peroutka@noaa.gov.*

**0.0 HARDWARE CHANGE TO THE BASELINE SYSTEM**

*None.*